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Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A_Geneseq_1101:*
1: /SIDS8/gcgdata
2: /SIDS8/gcgdata
3: /SIDS8/gcgdata
                  9:
110:
111:
12:
13:
13:
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17:
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20:
| SIDSB/gcgdata/geneseq/geneseqp/AA1980.DAT:*
| SIDSB/gcgdata/geneseq/geneseqp/AA1981.DAT:*
| SIDSB/gcgdata/geneseq/geneseqp/AA1981.DAT:*
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| SIDSB/gcgdata/geneseq/geneseqp/AA1999.DAT:*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-582-711-3
252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              January 28, 2002, 07:37:30; Search time 23.93 Seconds (without alignments) 151.675 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STGHSGSQHSHTTTQGRSDA.....TSRETRDQEQSGDGSRHSGS
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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62	62	62	62	62	62	62	62	62	62.5	63	63	63	63	63	63.5	63.5	63.5	63.5	63.5	63.5	64	64	65	65	66	66.5	66.5	66.5	67			69	
24.6	24.6	•	•	•	•		٠	•	24.8	•	٠	٠		•	•	٠	٠	•	•		•	•	•	•	٠	•		•	•	•	26.6	•	28.0
476	442	431	387	276	234	98	61	61	189	1850	759	529	529	529	328	326	290	288	282	280	3025	16	655	413	860	674	594	330	574	443	306	717	1275
19	22	22	22	21	22	21	22	22	22	22	22	21	19	19	21	21	21	21	21	21	10	20	22	22	19	21	22	21	22	22	21	22	21
AAW37241	AAM40816	AAG74995	AAG62626	AAB56814	AAB94508	AAG01314	AAM31309	AAM18795	AAG82799	AAB72210	AAB94613	AAY44989	AAW85055	AAW80498	AAG46428	AAG24814	AAG46429	AAG24815	AAG46430	AAG24816	AAP93284	AAY22952	AAB70771	AAY72163	AAW63700	AAY53044	AAU12176	AAY70227	AAM41855	AAM40069	AAB54149	AAB31581	AAY44262
0	Human polypeptide	Human colon cancer	Human RNA helicase	Human prostate can	Human protein segu	Human secreted pro	Peptide #5346 enco	Peptide #5229 enco	S. epidermidis ope	Modified chicken v	Human protein sequ	Human epidermal pr	Human protein desi	A protein designat	Arabidopsis thalia	Arabidopsis thalia	İS	Arabidopsis thalia		Arabidopsis thalia	Sequence of clone	Synthetic peptide	Murine neutral cer	Human RNA metaboli	Receptor type tyro	_	Human PRO4988 poly	Human RNA-associat	Human polypeptide	Human polypeptide	Human pancreatic c	Amino acid sequenc	Human cell cycle r

ALIGNMENTS

RESULT 1 AAW50747

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Arnaud M, Dalbon P,
Sebbag M, Serre G,
Girbal-Neuhauser E,
                                                                                                                                                                                              Filaggrin; antigen; anti-filaggrin; rheumatoid polyarthritis; citrulline; antibody.
                         WPI; 1998-207042/18.
                                                                            (INMR ) BIOMERIEUX SA.
                                                                                              30-AUG-1996;
                                                                                                               01-SEP-1997;
                                                                                                                                 05-MAR-1998.
                                                                                                                                                  WO9808946-A1.
                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                        Pepide S-47-S derived from filaggrin.
                                                                                                                                                                                                                                          31-JUL-1998
                                                                                                                                                                                                                                                            AAW50747;
                                                                                                                                                                                                                                                                             AAW50747 standard; Protein;
                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                          (first entry)
                                                                                              96FR-0010651
                                                                                                                97WO-FR01541.
                                        Jolivet M;
Simon M, Vincent
Jolivet-Reynaud C;
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Artificial antigen recognised by anti-filaggrin auto-antibodies modified form of filaggrin with citrulline replacing at least or

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AAY23931
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Best Local
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         specifically recognized by anti-filaggrin autoantibodies present in the serum of patients suffering from rheumatoid arthritis, and are derived from all or part of the sequence of a filaggrin unit. At least one arginine residue is substituted for citrulline. The antigenic peptide is used to obtain medicines to inhibit anti-filaggrin autoantibodies from binding their antigenic target. Pharmaceutical compositions containing the citrulline peptides are
                                                                                                                                                                                                                                                                                                                                                                                                                  Arnaud M,
Sebbag M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to an artificial antigen recognised specifically by anti-filaggrin autoantibodies present in the serum of patients with rheumatoid polyarthritis. The artificial antigen is a recombinant or synthetic polypeptide containing at least part of a sequence derived from a filaggrin unit, or related molecule, by substitution of at least larginine residue by citrulline. The antigens are used for in vitro diagnosis of rheumatoid polyarthritis from complex formation with antibodies in usual immunoassays. Replacement of arginine by citrulline is essential for antigen-specific recognition by antibodies. This sequence represents a peptide fragment of filaggrin corresponding to residues 71-119 and contains 6 arginine residues.
                                                                                                                                                                                                                                                                                          Filaggrin-derived citrulline peptide antigens, useful for treatment
                                                                                                                                                                         AAY23931-33 represent filaggrin-derived peptide antigens. They are
                                                                                                                                                                                                                                     Claim
                                                                                                                                                                                                                                                                              of rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-407426/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYTO-) UNIV TOULOUSE SABATIER PAUL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FR2773078-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Filaggrin; antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Filaggrin-derived peptide antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY23931;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4;
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for the treatment of rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                              Page 17; 26pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 14; 37pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                  Dalbon P,
Serre GBR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97FR-0016672.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97FR-0016672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for diagnosis of rheumatoid polyarthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 autoantibody; rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                               Girbal NE,
, Simon M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 252; DB 19;
Pred. No. 2.6e-23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                  Vincent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                     Jolivet M;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49;
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2 TGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS

49

Query Match Best Local Matches

39;

Conservative

Pred. No. 3.96 1; Mismatches Score 208; Pred. No. 3

DB 20; :.9e-17;

Length 330; Indels

0

Gaps '

0

Similarity

82.5%; 81.2%;

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AAY22954
ID AAY
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                    AAY22954-57 represent amino acid sequences of human filagrin clones. The specification describes peptides derived from any variant of natural filagrin or any variant of intermediate filament proteins. These peptides contain at least one citruline residue which is crucial for reacting with antibodies that are present in sera from patients with rheumatoid arthritis. The peptides constitute immunogenic determinants of antibodies present in patients with rheumatoid arthritis. The peptides, antibodies, immunotoxins and intermediate filament proteins can be used for the preparation of a therapeutic or of a diagnostic for rheumatoid arthritis. The peptides can also be used for the diagnostic for an autoantigen and a rheumatoid arthritis specific autoantibody. The products can also be used for the diagnosis and treatment of other autoimmune diseases e.g. systemic lupus erythematosus, discoid lupus erythematosus, scieroderma, dermatomyositis, or Sjogrens syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SO
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
Sequence
                                                                                                                                                                                                                                                                                                         WPI; 1999-385357/32
                                                                                                                                                                                                                                                  Example 1; Fig 2; 73pp; English.
                                                                                                                                                                                                                                                                             New peptide derived from
                                                                                                                                                                                                                                                                                                                                   Meheus L,
                                                                                                                                                                                                                                                                                                                                                             (INNO-) INNOGENETICS NV
                                                                                                                                                                                                                                                                                                                                                                                        09-APR-1998;
28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                30-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dermatomyositis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antigen; immunotoxin; autoantigen; autoantibody; autoimmune disease; systemic lupus erythematosus; discoid lupus erythematosus; scleroderma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Filaggrin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human filagrin sequence of clone HB2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY22954;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY22954 standard; peptide; 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9928344-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                l Similarity
49; Conserv
 330
                                                                                                                                                                                                                                                                                                                                   Raymackers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 intermediate filament
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97EP-0870195
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                                                                                                                                                                                                                                                                            intermediate
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Pred. No. 2.6e-23;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein;
                                                                                                                                                                                                                                                                          filament
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antibody; rheumatoid arthritis;
                                                                                                                                                                                                                                                                          proteins
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RESULT AAY2955
ID AAY2
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AAY22956
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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                                               AAY22956
                                                                                                                       AAY22956 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 erythematosus, scleroderma,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New peptide derived from intermediate filament proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Meheus L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-APR-1998;
28-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-AUG-1999 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (INNO-) INNOGENETICS NV
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                                                                                                                                                                                                                                                                                                       sghsgshhshttsqgrsdashgqsgsrsasrqtrndeqsgdgsrhsgs
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97EP-0870195
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                                                                                                                   peptide; 330
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81.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 208; DB 20;
Pred. No. 3.9e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY22954-57 represent amino acid sequences of human filagrin clones. The specification describes peptides derived from any variant of natural filagrin or any variant of intermediate filament proteins. These peptides contain at least one citrulline residue which is crucial for reacting with antibodies that are present in sera from patients with rheumatoid arthritis. The peptides constitute immunogenic determinants of antibodies present in patients with rheumatoid arthritis. The peptides, antibodies, immunotoxins and intermediate arthritis. The peptides, antibodies, immunotoxins and intermediate filament proteins can be used for the preparation of a therapeutic or of a diagnostic for rheumatoid arthritis. The peptides can also be used for identifying compounds which modulate the interaction between an autoantigen and a rheumatoid arthritis specific autoantibody. The products can also be used for the diagnosis and treatment of other autoimmune diseases e.g. systemic lupus erythematosus, discoid lupus erythematosus, scleroderma, dermatomyositis, or Sjogrens syndrome.
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Best Local
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                                                                       Filaggrin; intermediate filament protein; antibody; rheumatoid arthriti antigen; immunotoxin; autoantigen; autoantibody; autoimmune disease; systemic lupus erythematosus; discoid lupus erythematosus; scleroderma;
                                                                                                                                                                                                                               Human filagrin sequence of clone HB2648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY22957 standard; peptide;
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28-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-AUG-1999 (first entry)
                                       dermatomyositis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ch 82.5%;
l Similarity 81.2%;
39; Conservative
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lupus erythematosus; discoid lupus erythematosus; scleroderma;
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Pred. No. 3.9e-17;
4; Mismatches 5;
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autoantibody; autoimmune disease;
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Matches 39
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY22954-57 represent amino acid sequences of human filagrin clones. specification describes peptides derived from any variant of natural filaggrin or any variant of intermediate filament proteins. These peptides contain at least one citrulline residue which is crucial for reacting with antibodies that are present in sera from patients with rheumatoid arthritis. The peptides constitute immunogenic
               09-JUL-1991.
                                         US7535206-A
                                                                                Peptide
                                                                                                          Protein
                                                                                                                                                  Homo sapiens
                                                                                                                                                                          NK; cytotoxic
                                                                                                                                                                                                   Murine Natural Killer receptor.
                                                                                                                                                                                                                                22-OCT-1991
                                                                                                                                                                                                                                                          AAR13320;
                                                                                                                                                                                                                                                                                  AAR13320 standard; Protein; 982 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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28-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New peptide derived from intermediate filament proteins
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39; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                          drugs; tumour cell
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97EP-0870195.
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                                                               /label= partial_signal_peptide
                                                                                                                    Location/Qualifiers
                                                                                           /label= mature_NK_receptor
                                                                                                                                                                                                                                                                                                                                                                                                                82.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                 Score 207; DB 20; Pred. No. 5.1e-17;
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Matches 22
                                                                                                                             04 - FEB - 2000;
26 - MAY - 2000;
30 - JUN - 2000;
03 - AUG - 2000;
                                                                                              21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Overlapping clones, which make up the cDNA sequence from which this sequence was deduced, were isolated from a murine PBL cDNA library prepared in lambda gtl0. The purified protein can mediate the cytolytic activity of mammalian cells. It specifically distinguishes tumour cells making it a candidate for the development of products
                                                                                                                                                                                    30-JAN-2001; 2001WO-US00670
                                                                                                                                                                                                                               WO200157278-A2
                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                           Peptide
                                                                                                                                                                                                                                                                                                                               12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                     AAM21759
                                                                                                                                                                                                                                                                                                                                                                         AAM21759 standard; Protein; 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 2; 30pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA encoding a natural killer cell receptor - used to develop prods. for the immuno-detection and immuno-therapy of tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ortaldo J, Young H,
                                                                        (MOLE-)
                                                                                                                                                                                                         09-AUG-2001.
                                                                                                                                                                                                                                                                                    Probe; human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     See also AAQ13114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (USSH ) NAT INST OF HEALTH
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                                                                                                                                                                                                                                                                                                                                                                                                                           693 ssgrsgskssrsrsssrsytrsrsrslptsrslsrspssrshspnkysdgsqhsrs 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 STGHSGSQHSHTTTQGRS----DASRGSSGSRSTSRETRDQEQS-----GDGSRHSGS 49
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the immunodetection and immunotherapy
                             2001-488901/53.
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                                                                                                                                                                                                                                                                                                         #8193 encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 39.3
22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ13115
                                                                        MOLECULAR DYNAMICS
                                                  Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               982 AA;
                                                                                                       2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
                                                                                                                                                                                                                                                                                                                              (first entry)
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39.3%;
                                                   Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Anderson
                                                                                                                                                                                                                                                                                                       probe for measuring cervical gene expression.
                                                  Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6;
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                                                                                                                                                                                                                                                                                                                                                                          AA
                                                   Rank
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Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells -

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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                          30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
       The present invention relates to single exon nucleic acid probes (SENP: see AAI31315-AAI57546). The present sequence is a peptide encoded by one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to human single exon nucleic acid probes (SENF: see AAI10068-AAI28459). The present sequence is a peptide encoded by one such probe. The SENFs are derived from human HeLa cells. The SENFs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptide #12118 encoded by probe for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAM38081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim
                                                                                                        Human genome-derived single analyzing gene expression in
                                                                                                                                                                                                                                                                              04-FEB-2000;
26-MAY-2000;
                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                            09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                   genetic
                                                                                                                                                                                                                                                                                                                                                                                                                               Probe; microarray;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Note: The sequence data for this patent did not specification, but was obtained in electronic for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                            (MOLE-)
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                                                                                                                                                                    SG,
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                                                                                                                                                                                            MOLECULAR DYNAMICS INC
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                                                                                  SEQ
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2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0024263.
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                                                                                                                                                                                                                                                                               2000US-0180312.
2000US-0207456.
                                                                                                                                                                                                                                                                                                                    2001WO-US00663
                                                                                ID No 38350; 654pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                              human; placenta; antenatal diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein;
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                                                                                                                                                                    Chen W,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63
                                                                                                                  exon nucleic acid
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Pred.
                                                                                                        human placenta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                 English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72.5; DB
No. 0.091;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      measuring placental gene expression.
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format
                                                                                                                   probes
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                                          probes (SENP: encoded by one
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-AUG-1999;
11-JAN-2000;
02-MAY-2000;
                                                                                                                                                                        The present invention describes primer sets for synthesising 5602 full-length cDNAs defined in the specification. Where a primer set comprises: (a) an oligo-dT primer and an oligonucleotide complementary to the complementary strand of a polynucleotide which comprises one of the 5602 nucleotide sequences defined in the specification, where the oligonucleotide comprises at least 15 nucleotides; or (b) a combination of an oligonucleotide comprises at sequence complementary to the complementary strand of a polynucleotide which comprises a 5'-end
       the specification. The primer sets can be used in antisense therapy and in gene therapy. The primers are useful for synthesising polynucleotides particularly full-length cDNAs. The primers are also useful for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs. The primers allow obtaining of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to
                                                                                               sequence and an oligonucleotide comprising a sequence complementary to a polynucleotide which comprises a 3'end sequence, where the oligonucleotide comprises at least 15 nucleotides and the combination of the 5'end sequence/3'end sequence is selected from those defined in the specification. The primer sets can be used in antisense therapy and the specification.
                                                                                                                                                                                                                                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                                                 Claim 8;
                                                                                                                                                                                                                                                                                                                                                           full-length cDNAs de and/or diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; primer;
                                                                                                                                                                                                                                                                                                                                              full-length cDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ota T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JUL-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (HELI-)
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                                                                                                                                                                                                                                                                                                                  SEQ ID 12809;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sugiyama T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                           for synthesizing polynucleotides, particularly the cDNAs defined in the specification, and for the det nosis of the abnormality of the proteins encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000JP-0118776.
2000JP-0183767.
2000JP-0241899.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           detection; diagnosis; antisense therapy; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99JP-0300253
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nishikawa T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein;
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43.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wakamatsu
                                                                                                                                                                                                                                                                                                                 2537pp + CD ROM;
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Pred. No. 0.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nagai K,
                                                                                                                                                                                                                                                                                                                 English.
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(, Otsuki
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                                                                                                                                                                                                                                                                                                                                                           detection by the
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RESULT :
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The invention provides a human CIF150/hTAFIII50 (CT) polypeptide that is CI involved in mitosis and cell cycle progression. The CT protein CC recognises and selects TATA-less core promoters for cell cycle specific cycle genes. The CT protein plays a role in establishing gene expression core patterns necessary for progression through the cell cycle. CT is a necessary transcriptional regulator of cell cycle progression through cc cycle. The products can be used for affecting mitosis or cell cycle progression and treating disorders associated with alterations in mitosis corell cycle progression and treating disorders associated with alterations in mitosis or cell cycle progression. Decreased CT gene expression can be used to treat conditions characterised by high rates of mitosis, such as complasia, metastasis of neoplasms, benign proliferative diseases, and cycle progression also be used to identify genes whose expression has been decreased can also be used to identify genes whose expression is cell populations in vitro or for treating disorders such as anemia, which care characterised by lowered rates of mitosis. The CT and its binding celement (sequence AAX91487) can be used to increase expression of a gene, either in vitro, such as in a cell culture, or in vivo. The products can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
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                                                                                                                                                                                                                                                                                                              Claim 23; Page 79-81; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; AAX91484
                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-444069/37
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-JUL-1999.
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                                                                                                                                                                                                                                                                                                                                            New isolated lCIF150/hTAFII150 polypeptides
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-DEC-1998;
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Pred. No. 1.3;
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Misc-difference 1210
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Misc-difference 1255
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Misc-difference 1079
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09-DEC-1998;
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Misc-difference 1233
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                                                                                                                                                                                                                                                                                                                                                                                               Human cell cycle regulator
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         also be used for the diagnosis, prognosis and predicting susceptibility to neoplasia. The present sequence represents a human CIF130 protein that
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98US-0111636
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                                                                                                                                                                                                          ulcerative colitis; atopic dermatitis; dermatomyositis; osteoporosis; atrophic gastritis; diabetes mellitus; erythema nodosum; pancreatitis; glomerulonephritis; Graves' diseases' diseases; polymyositis; irritable bowel syndrome; lupus erythematosus; multiple sclerosis; myasthenia gravis; myocardial or pericardial inflammation; hemodialysicosteoarthritis; rheumatoid arthritis; Sjogren's syndrome; trauma;
                                                                                                                                                                                                                                                                     Addison's disease; neoplastic disorder; immunological disorder; gout; adult respiratory distress syndrome; allergy; anaemia; asthma; cancer; atherosclerosis; bronchitis; cholecystitis; Crohn's disease; scleroderma;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
Best I
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                            analysis, tissue identification and/or typing and a
                                              pancreatic cancer antigen polynucleotides can be used to acid hybridisation probes that can be used in chromosome
                                                                                            subject. Binding partners to the proteins and the activity of the proteins can be identified. The pancreatic cancer antigens can be used detect, treat or prevent pancreatic disorders, especially cancer agonists and antagonists to the antigens can be screened for The
                                                                                                                                                                                         in gene therapy. The polynucleotide and proteins can be used for preventing, treating, or ameliorating a medical condition or in assays for diagnosing a pathological condition or a susceptibility to one in the condition of a susceptibility of the condition of the condi
                                                                                                                                                                                                                                                                       gynaecological, cardiant and antiinflammatory activities,
                                                                                                                                                                                                                                                                                                                        proteins, called pancreatic cancer antigens, given in AAB54008 AAB54466. The human pancreatic cancer antigens have cytostatic,
                                                                                                                                                                                                                                                                                                                                                                         AAC98773 to AAC99231 encode the human
                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory; cardiant; gene
linkage analysis; tissue identif
neural; immune system; muscular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nootropic; immunomodulatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB54149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        autoimmune thyroiditis, complications of cancer, hemodialysis, a extracorporeal circulation, trauma, and viral, bacterial fungal,
                                                                                                                                                                                                                                                                                                 neuroprotective, nootropic, immunomodulatory, relaxant, contraceptive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAR-2000; 2000WO-US05989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200055320-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pulmonary; cardiovascular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human pancreatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB54149 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HUMA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               577
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  diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic acid that is a pancreatic cancer antigen for preventing, ating, or ameliorating a medical condition, particular pancreatic cer, or for use in assays for diagnosing a pathological condition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000-579444/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens.
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19; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pancreas; pancreatic cancer; pancreatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC98914
                                                                                                                                                                                                                                                                                                                                                                                                                          Page 1037-1038; 1379pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnosis; identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protozoal,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tissue identification; tissue typing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
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  The
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene therapy;
proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fication; cytostatic; neu
relaxant; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 3.6; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               reproductive;
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  can
                                                                                                                                                                                                                                                                                                                                                                              pancreatic cancer
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                         variety of forensic
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                                                                                                                                                                                                                                                                                                                                                                              associated
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                                                 design nucleic mapping, linkage
                                                                                                                                                                                                                                                                          and can be used
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                                                                                                                                                                                                                                                                                                          21-JAN-2000;
25-APR-2000;
09-JUL-2000;
19-JUL-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69001
                                                                                                                                                                                           Tang YT,
Wang J,
Zhao QA,
                                                                                                                                                                                                                                                                      14-SEP-2000;
19-OCT-2000;
29-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  which are used to purify, detect and target the polypeptides, including both in vivo and in vitro diagnostic and therapeutic methods. The proteins can be used to treat or prevent neural, immune system, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal or proliferative disorders. AAC99232 to AAC99240 and AAB54467 represent
The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polypucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                Novel nucleic acids and polypeptides, useful for such as central nervous system injuries -
                                                                                                                                                                                                                                                                                                                                                                                         26-DEC-2000; 2000WO-US34263
                                                                                                                                                                                                                                                                                                                                                                                                                   26-JUL-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200153312-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human polypeptide SEQ ID NO 3214.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAM40069;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAM40069 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequences used in the exemplification of the present invention.
                                                                                        Example
                                                                                                                                                                                                                                             (HYSE-) HYSEQ INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001-442253/47.
DB; AAI59225.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
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                                                                                      5; SEQ ID NO 3214; 10078pp; English.
                                                                                                                                                                                           Liu C,
Wang Z,
Zhou P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                306 AA;
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2000US-0552317.
2000US-0598042.
2000US-0620312.
2000US-062312.
2000US-0663450.
2000US-0663191.
2000US-0593036.
2000US-0727344.
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                                                                                                                                                                                            Wehrman T,
Goodrich
                                                                                                                                                                                                       Asundi V,
Wehrman T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein; 443
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37.0%;
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Pred. No. 2.4;
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Drmanac R
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eaJ,
RT;
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Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17;
                                                                                                                                                                                                       Yang
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                                                                                                                             treating
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                                                                                                                                                                                                       Zhang J;
                                                                                                                                                                                                                     Ren F,
                                                                                                                               disorders
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                                                                                                                                                                                                                    Wang
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                                                                      Matches
                                                                                        Best
                                                                                                       Query Match
                                                                                                                                                                                                                                           localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and thrapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and
                                                                                                                                                         Sequence
                                                                                                                                                                                            specification.
                                                                                                                                                                                                            Note: The sequence data for this patent did not
                                                                                                                                                                                                                            assays for receptor activity, arthritis \text{C.N.S} disorders
   377
                                                                                        Local
                                    ب
ntssnsrqrsgwssgrsgrsgrsggrsggrs-grqsrqgsrsgsrqdgrrrsgn
                  STGHSGSQHSHTTT--QGRSDASRGSSGSRSTSRETRDQEQSG---DGSRHSGS
                                                                    Similarity 38.9
21; Conservative
                                                                                                                                                           443
                                                                                                                                                           AA;
                                                                                      26.6%;
38.9%;
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                                                                                    Score 67; DB Pred. No. 3.6;
                                                                      Mismatches
                                                                                                       22;
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                                                                                                                                                                                                            form part of the printed
                                                                                                       Length 443;
                                                                      Indels
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Search completed: January 28, 2002, 07:39:28 Job time: 118 sec

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Total number of hits satisfying chosen parameters:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
5: /cgn2_6/ptodata/2,
6: /cgn2_6/ptodata/2,
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length: 2000000000
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Maximum Match 100%
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/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/FCTUS_COMB.pep:*
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US-09-32-295-2
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PCT-US94-04496-55
US-09-110-517-2
US-09-184-094-120
US-08-184-09-120
US-08-184-09-120
US-08-184-09-120
US-08-18-25-0-3
US-08-18-25-0-3
US-08-18-25-0-3
US-08-18-25-0-3
US-08-18-26-89-120
US-08-18-26-89-120
US-08-18-27-88-20-3
PCT-US92-05-27-3
US-08-18-24-40
US-08-59-18-40
US-08-944-433A-40
US-08-944-433A-40
US-08-941-50-99-12
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Sequence 4, Appli
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                                      55, Appl
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120, App
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12
                                                             ; LENGTH: 743 amino acid:
; TYPE: amino acid:
; STRANDEDNESS: single
; TOPOLOGY: Linear
; IMMEDIATE SOURCE:
; LIBRARY: GenBank
; CLONE: 1684847
US-08-910-925-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1
US-08-910-925-3
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Query Match
                                                                                                                                                                                                                                                                                                 COMPUTER: IN COMPARTING SYSTEM: DOS SOFTWARE: FastSEQ for Windows Version 2. SOFTWARE: FastSEQ for Windows Version 2. CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/910,925
FILING DATE: Herewith
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
FILING DATE:
APPLICATION NUMBER:
APPLICATION NUMBER:
APPLICATION NUMBER:
APPLICATION NUMBER:
APPLICATION NUMBER:
FILING DATE:
FILING DATE:
APPLICATION INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: PF-0365 US
TELEPHONE: 650-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Bandman, Olga
APPLICANT: Lal, Preeti
APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN PININ SE
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
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SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Diskett
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    Grade Control Con
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US-08-545-860D-30

PCT-US94-04496-30

US-08-549-004A-5

US-08-723-415B-10

US-08-723-415B-11

US-08-602-846-2

US-08-602-846-2

US-09-189-627A-10

US-09-189-627A-11

US-09-189-627A-11

US-09-189-627A-11

US-09-189-627A-11

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US-09-189-627A-11

US-09-189-627A-11

US-09-189-627A-11

US-09-189-627-862-2

US-09-189-627-862-2

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US-09-434-065-2
  Score 73;
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Length 743;
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Sequence 30, Appl
Sequence 30, Appl
Sequence 5, Appli
Sequence 5, Appli
Sequence 11, Appli
Sequence 12, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 11, Appl
Sequence 11, Appli
Sequence 2, Appli
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Score

Minimum DB seq Maximum DB seq

Searched:

Scoring table: Sequence: Perfect score: Title:

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Database :

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; ORGANISM: human
US-09-208-742-4
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                                                                                                          RESULT 4
US-08-910-925-4
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TITLE OF INVENTION: CIF150/hTAFII150 is Necessary for Cell
TITLE OF INVENTION: CYCLE Progression
FILE REFERENCE: 1453.002
CURRENT APPLICATION NUMBER: US/09/208,742
CURRENT FILING DATE: 1998-12-10
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 4
LENGTH: 1261
                                                     Sequence 4, Application US/08910925 Patent No. 6162601 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/09332295
Patent No. 6303372
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 2
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Best Local Similarity
Matches 15; Conserv
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Best Local
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TITLE OF INVENTION: CIFT30 INHIBITS CELL CYCLE PROGRESSION
FILE REPERENCE: 200130.456 / 1513.003
CURRENT APPLICATION NUMBER: US/09/332,295
CURRENT FILING DATE: 1999-06-11
                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 1261
 APPLICANT:
                                                                                                                                                                                 847 GSNGKRERYTENRGSSRHSHGETGNRHS----DSPRHGDGGRH 885
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Lal, Preeti
Shah, Purvi
                                                                                                                                                                                                                                                            Conservative
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                                    Bandman, Olga
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34.1%;
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                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/08910925 Patent No. 6162601
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Best Local Similarity
                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
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NAME: Billings, Lucy J.

REGISTRATION NUMBER: 36,749

REFERENCE/DOCKET NUMBER: PF-C

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650-855-0555
               ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compati
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                            APPLICANT: Lal, Preeti
APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN PININ SPLICE VARIANT
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                 APPLICANT: Bandman, Olga
APPLICANT: Lal, Preeti
APPLICANT: Shah, Purvi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS: LENGTH: 703 amino acid
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: HUMAN PININ SPLICE VARIANT NUMBER OF SEQUENCES: 4
                                                                                                                                                                                                                                                                                                                                                                                                                  LIBRARY: GC...
1684843
                                                                                                                                             CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                               STREET:
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                                                                                                                COUNTRY:
                                                                                                                                   STATE:
                                                                                                                                                                ADDRESSEE: Incyte Pharmaceuticals, Inc. STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Incyte Pharmaceuticals, Inc STREET: 3174 Porter Drive
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38.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No.
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: WEI, Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                        PRIOR DATE: HEREWITH
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/030,189
FILING DATE: 04-NOV-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
 REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 717 amino acids
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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CLONE: 53219
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TOPOLOGY: 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
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                                                   REGISTRATION NUMBER:
                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVENUE, NW, SUITE 600
TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS 49
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                                                                                                                                                                                                                                                                                                                            WASHINGTON
: DC
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SANCAR, AZIZ
HSU, SHIAO-WEN D
KAZANTSEV, ALEKSEY G
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38.8%;
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                                                                                                                                                                       US/08/964,268
                                               36,688
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                                   1488.0750001/EKS
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                                                                                                                                                                                                       Version #1.30
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RESULT 7
5223423-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GALLO, ROBERT
TITLE OF INVENTION: CHARACTERIZATION OF REPLICATION COMPETENT
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 55,
Patent No. 6
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Best Local Similarity 27.0%;
Matches 17; Conservative
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APPLICANT: Croce, Carlo
APPLICANT: Canaani, Eli
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CURRENT APPLICATION DATA:
                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Diagnostics, Therapeutics and Methods TITLE OF INVENTION: for Detection and Treatment of Acute TITLE OF INVENTION: Resulting from Chromosome Abnormaliti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: FRANCHINI, GENOVEFFA; WONG-STAAL, FLOSSIE;
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               SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2704 EGS 2706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2644 TSSNHSETGDSRQPTCSMGASGSKKRSRPSRGLQERLLRARGGACGGLWDESEGGYSQFH 2703
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                                                                                                                                                                  STREET: One Liberty Place, 46th floor CITY: Philadelphia STATE: Pennsylvania
                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    47 SGS 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 03-31-1989
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                                                                                                                                COUNTRY: UZIP: 19103
                                                                                                                                                                                                                        ADDRESSEE: Woodcock, Washburn, Kurtz, Mackiewitz & ADDRESSEE: No. 6040140ris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 HSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQ 37
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/08545860D
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                                                                                                                                                  USA
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                                                                                                                                                                                                                                                                                                 for Detection and Treatment of Acute Leukemias Resulting from Chromosome Abnormalities in the All-1 Region
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41.2%;
US/08/545,860D
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Pred. No. 24;
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PRIOR APPLICATION DATA:

FILING DATE:

22-APR-1994

PCT/US94/04496

APPLICATION NUMBER: PCT/ FILING DATE: 09-DEC-1992

PCT/US92/10930

PRIOR APPLICATION DATA:

FILING DATE: 0 CLASSIFICATION:

07-MAR-1996

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US-08-545-860D-55
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Best Local Similarity
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MOLECULE TYPE: P
HYPOTHETICAL: NO
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COMPUTER READABLE FORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/971,094
FILING DATE: 30-OCT-1992
                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                 TITLE OF INVENTION:
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APPLICATION NUMBER: US 07/805,093
FILING DATE: 11-DEC-1991
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APPLICATION NUMBER: 1
FILING DATE: 27-MAY-
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PRIOR APPLICATION NUMBER: US 08/327,392
                                                                                                                                                                                                  APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: DeLuca Esq., Mark REGISTRATION NUMBER: 33 REFERENCE/DOCKET NUMBER:
                              COUNTRY:
                                                                                      ADDRESSEE: Woodco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: sir
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                                                          ITY: Philadelphia
               19103
                                          Pennsylvania
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                                                                       One Liberty Place, 46th floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1093 amino acids
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NO
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27-MAY-1992
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11-OCT-1994
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                                                                                                                                   Diagnostics, Therapeutics and Methods
for Detection and Treatment of Acute Leukemias
Resulting from Chromosome Abnormalities in the All-1
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                                                                                                                                                                                                                                                                                                                                                                                           24.48;
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Pred. No. 15;
8; Mismatches
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Sequence 3, Application US/08257073 Patent No. 5766597 GENERAL INFORMATION:

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RESULT 11
US-08-257-073-3
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US-09-110-517-2
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Best Local Similarity 34.8
16; Conservative
                                                                                                                                                                                                                                                                                     CURRENT FILING DATE: 1998-07-06
NUMBER OF SEQ ID NOS: 51
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2
LENGTH: 1581
                                                                                                                                            Query Match
Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/09110517A Patent No. 6248520
                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Roeder, Robert G
APPLICANT: Fondell, Joseph D
APPLICANT: Fondell, Joseph D
APPLICANT: Yuan, Chao X
APPLICANT: Ito, Mitsuhiro
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING NUCLEAR HORMONE
TITLE OF INVENTION: RECEPTOR COACTIVATORS AND USES THEREOF
ETLE REFERENCE: 600-1-224
CURRENT APPLICATION NUMBER: US/09/110,517A
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                                                                                                                                                                                                                                                                        TYPE: PRT
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                                                                     1100 HSSSSSSASTSGKMKSSKSEGSSSSKLSSSMYSSQGSSGSSQSKNSS 1147
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HYPOTHETICAL: N
ANTI-SENSE: NO
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NAME: DeLuca Esq., mark
REGISTRATION NUMBER: 33,
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                                                                                                       4 HSGSQHSHTTTQG--RSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQ---SGDG 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1093 amino acids
                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (215) 568-3439
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                                                                                                                                                             24.2%;
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                                                                                                                                                             Score 61;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , 8
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Pred. No. 15;
                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                             DB 4; Length 1581; 26;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19; Indels
                                                                                                                                          24; Indels
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                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                           Sequence 120, Application US/08184009 Patent No. 5833975
                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/672,183
FILING DATE: 20-MAR-1991
ATTORNEY/AGENT INFORMATION:
                                                        TITLE OF INVENTION: RECOMBINANT VIRUS IMMUNOTHERAPY NUMBER OF SEQUENCES: 217
CORRESPONDENCE ADDRESS:
                                                                                                            APPLICANT: Tarta APPLICANT: Cox,
                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: FRAGMENT TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 18-MAR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/075,783
FILING DATE: 11-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Tine, John A.
TITLE OF INVENTION: MALARIA RECOMBINANT POXVIRUS VACCINE
NUMBER OF SEQUENCES: 143
                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                            STREET:
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TOPOLOGY: li
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REFERENCE/DOCKET NUMBER: 454310-2570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Frommer, William S. REGISTRATION NUMBER: 25,5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
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                                            ADDRESSEE:
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                                                                                                                                                                                                                                                                                                           1 STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGS 44
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New York
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                              530 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           984 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (212) 840-3333
(212) 840-0712
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Tine, John A.
                                                                                                            Tartaglia, James Cox, William I.
                                                                                                                                           Paoletti, Enzo
                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                 Curtis,
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18-MAR-1992
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                                             Morris & Safford
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                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 984;
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; FRAGMENT TYPE:
US-08-184-009-120
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                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Paoletti, Enzo
APPLICANT: Tartaglia, James
APPLICANT: Cox, William I.
TITLE OF INVENTION: RECOMBINA
NUMBER OF SEQUENCES: 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 120, Patent No. 59
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Best Local (
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TELEX: 425066CURTMS
INFORMATION FOR SEQ ID NO:
                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/CONTROL OZ-JUN-1995
FILING DATE: OZ-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 25,506
REFERENCE/DOCKET NUMBER: 45
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: US/0
FILING DATE: 19-JAN-1994
CLASSIFICATION: 435
                                           APPLICATION NUMBER: US 0
FILING DATE: 19-JAN-1994
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 31.8 hes 14; Conservative
                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ZIP: 10036
        NAME: Frommer, William S. REGISTRATION NUMBER: 25,5
                                                                                                                                                                                                                                                                      COUNTRY: US
ZIP: 10036
                                                                                                                                                                                                                                                                                                       STATE:
                                                                                                                                                                                                                                                                                                                     STREET: 530 F1
CITY: New York
                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Curtis, Morris & Safford STREET: 530 Fifth Avenue
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STRANDEDNESS: sir
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REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGS 44
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5942235
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                                                                                                                                                                                   PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                   Floppy disk
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                                                                                                                                  02-JUN-1995
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                                                                                US 08/184,009
                                                                                                                                                  US/08/458,356
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              25,506
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454310-2530
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TELEPHONE:

: (212) 840-3333 (212) 840-0712

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Best Local S
Matches 14
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SEQUENCE CHARACTERISTICS:
LENGTH: 984 amino
Query Match
Best Local Similarity
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                                                                                                                                     INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 984 amino acids
TYPE: amino acid
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TOPOLOGY: line
MOLECULE TYPE: |
FRAGMENT TYPE:
                                                                                                                                                                                                           NAME: Frommer, William S.
REFEISTRATION NUMBER: 25,506
REFERENCE/DOCKET NUMBER: 454310-2530
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 840-3333
TELEFAX: (212) 840-0712
                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/184,009
FILING DATE: 19-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Frommer, William S.
                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0.
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 550
STREET: 550
CITY: New York
TWATE: NY
                                                                          MOLECULE TYPE:
FRAGMENT TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Curtis, M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Tartaglia, James
APPLICANT: Cox, William I.
TITLE OF INVENTION: RECOMBINANT VIRUS IMMUNOTHERAPY
NUMBER OF SEQUENCES: 217
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 02-JUICLASSIFICATION: 51
                                                                                                           TOPOLOGY:
                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
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linear
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                                                                                                         linear
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internal
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02-JUN-1995
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internal
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 23.8%;
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   Score
Pred.
 ₩0;
 DB 4;
20;
                 Length 984;
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Search completed: January 28, 2002, 07:38:09 Job time: 39 sec
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                                                                                                                                                        Matches
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (703) 836-20 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/319,544
FILING DATE: 07-OCT-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 514 amino acids
                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 02
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: MODIFICATION OF SEED CROPS WITH TITLE OF INVENTION: TRANSCRIPTION FACTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
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                                                                                                                                                      Local Similarity 32.0 hes 15; Conservative
                                                                                                                                                                                                                                                                       STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 06-FEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Meuth, Donna I REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET:
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CHERN, Maw-Shenq
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Pred. No. 19;
7; Mismatches
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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252
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd
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pir2:*
pir3:*
pir4:*
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SRP40 protein - ye
AF-4 protein - mou
ORFB protein - Orf
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GTP-binding protei
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ErbB kinase activa
ErbB kinase activa
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thetical prote
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ALIGNMENTS

profilaggrin - human (fragments)
C;Speckes: Homo sapiens (man)
C;Date: 14-Dec-1990 #sequence_revision 02-Jul-1996 #text_change 29-Sep-1999
C;Accession: A35938
R;Gan, S.Q.; McBride, O.W.; Idler, W.W.; Markova, N.; Steinert, P.M.
Blochemistry 29, 9432-9440, 1990
A;Title: Organization, structure, and polymorphisms of the human profilaggr: A;Reference number: A35938; MUID:91064347
A;Accession: A35938

of the human profilaggrin gene

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R;MCKinley-Grant, L.J.; Idler, W.W.; Bernstein, T.A.; Parry, D.A.D.; Cannizzaro, L.; Proc. Natl. Acad. Sci. U.S.A. 86, 4848-4852, 1989
A;Title: Characterization of a cDNA clone encoding human filaggrin and localization A;Reference number: A32947; MUID:89296901
A;Accession: A32947
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-416 <MCK>
A;Cross-references: GB:M24355; NID:g182604; PIDN:AAA52454.1; PID:g182605
A;Note: the authors translated the codon CAC for residue 188 as Gln, and AAT for res
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,Gene: GDB:FLG
A,Gene: GDB:FLG
A,Cross references: GDB:119912; OMIM:135940
A;Cross references: GDB:119912; OMIM:135940
A;Map position: 1q21-1q21
C;Superfamily: unassigned calmodulin-related proteins; calmodulin repeat c;Keywords: EF hand; epidermis; polymorphism; tandem repeat F;246-569/Region: filaggrin repeat F;270-893/Region: filaggrin repeat F;1074-1397/Region: filaggrin repeat F;1573-1896/Region: filaggrin repeat
                                                                                                                                                                                                                                                                                                               filaggrin precursor - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 20-Dec-1989 #sequence_revision 04-Sep-1992 #text_change 29-Sep-1999
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A32947
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                                                                                                                                                                                                                                                                                        C; Accession: A32947
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Best Local Similarity 100.0%;
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Pred. No. 2.6e-19;
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R:Bevan, M.; Vitale, D.; Liguori,
submitted to the Protein Sequence
A:Reference number: Z15404
A:Accession: T05221
                                                                                                                                                                                                                                                                    C; Accession: T05221
R; Bevan, M.; Vitale
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Map position: 1q21-1q21
C;Superfamily: unassigned calmodulin-related proteins; calmodulin
C;Keywords: EF hand; epidermis; polymorphism; tandem repeat
E;49-81/Domain: calmodulin repeat homology <EF2>
                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-343 <BEV>
A; Cross-references: EMBL: AL031032
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C;Species un
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A;Map position: 1q21-1q21
C;Superfamily: unassigned calmodulin-related |
C;Keywords: EF hand; epidermis; polymorphism;
                                                                                         A; Map position: 4
A; Note: F1715.120
                                                                                                                                                                                                                                                                                                   hypothetical protein F1715.120 - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 23-Apr-1999 #sequence_revision 23-Apr-1999 #text_change 23-Jul-1999
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A; Residues: 1-591 <PRE>
A; Cross-references: GB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Species: Homo sapiens (man)
C;Date: 30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change 20-Sep-1999
C;Accession: A45135
R;Presland, R.B.; Haydock, P.V.; Fleckman, P.; Nirunsuksiri, W.; Dale, B.A.
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A; Gene: GDB:FLG
                                                                                                                                           A; Experimental source: cultivar Columbia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Reference number: A; Accession: A45135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Biol. Chem. 267, 23772-23781, A;Title: Characterization of the
                                                                                                                                                                                                                                                                                                                                                                               RESULT
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Query Match
Best Local S
Matches 21
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 21; Conserv
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   Conservative
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                  30.6%;
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81.2%;
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                Score 77; DB Pred. No. 0.3;
                                                                                                                                                                                                                                                   R.; Argiriou, A.; De Simone, V.; Hoheisel, Database, July 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 207; DB 2;
Pred. No. 4.9e-15;
5; Mismatches 4
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19;
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밁
                               QΥ
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MOl. Immunol. 30, 1307-1313, 1993
A;Title: IL-2 regulates the expression of
A;Reference number: I57820; MUID:94019422
A;Accession: I77662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Anderson, S.K.; Gallinger, S.; Roder, J.; Frey, J.; Young, H.A.; Ortaldo, Proc. Natl. Acad. Sci. U.S.A. 90, 542-546, 1993
A;Title: A cyclophilin-related protein involved in the function of natural l A;Reference number: A47328; MUID:93133824
A;Accession: B47328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1994 #sequence_revision 17-Jul-1994 #text_change 05-Nov-1999
C;Accession: B47328; 177662
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B47328
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S43693
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                                                                                                                                              C;Keywords: alternative splicing; lymphocyte F;60-230/Domain: cyclophilin homology <CYP>
                                                                                                                                                                                                                                         A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 235-237;363-294 <RIN>
A;Cross-references: GB:S65998; NID:9425701; PIDN:AAB28500.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: mRNA
A; Residues: 1-1507 < AND>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                natural killer cell tumor-recognition protein - mouse N; Alternate names: cyclophilin-related NK-tumor recognition protein; natural killer-t
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C;Superfamily: peni
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A; Residues: 1-716 < MUR>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R; Murakami, K.; Fujimura, T.; Doi, N
FEMS Microbiol. Lett. 117, 131-136,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Date: 10-Dec-1994 #sequence_revision 10-Nov-1995 #text_change 18-Feb-2000
                                                                                                                                                                                                                                                                                                                                                                                           R;Rinfret, A.; Anderson,
                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:L04289; NID:g192866
A;Note: authors translated the codon AGT for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Accession:
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                                                                                                                                                                                                         A; Gene: NK-TR
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                                                                                                                                                                                   Superfamily: natural killer cell tumor-recognition
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mes 17; Conserv
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STGHSGSQHSHTTTQGRS---DASRGSSGSRSTSRETRDQEQS----GDGSRHSGS 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SGSNHSSGTGSTHNGHSSGSNHSSATGSTHNGHTSTGSNHSSGNGSRHNG 138
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22; Conser
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                                                   Score 73.5; D
Pred. No. 3.1;
6; Mismatches
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SSGRSGSKSSRSRSSSRSYTRSRSRSLPTSRSLSRSPSSRSHSPNKYSDGSQHSRS 795

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R;Du, Z.; Gattung, S. submitted to the EMBL Data Library, April 1996
A;Description: The sequence of C. elegans cosmid F21C10.
A;Reference number: Z20610
A;Accession: T29343
                                                                      RESULT
T08745
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C.Comment: This protein functions in RNA metabolism, and is involved in processing of processing of processing of processing of processing of processing in the protein state of processing of processing in the protein state of processing of processing protein state protein repeat-containing proteins; ribonucleoprotein for product of processing proteins; ribonucleoprotein protein for product of the protein for 
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N;Alternate names: E5.1 protein
C;Species: Homo sapiens (man)
C;Date: 08-Feb-1996 #sequence_revision 19-Apr-1996 #text_change 24-Sep-1999
C;Accession: JC4525
R;Badolato, J; Gardiner, E.; Morrison, N.; Eisman, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein F21C10.4 - Caenorhabditis elegans C;Speckes: Caenorhabditis elegans C;Deckes: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999 C;Accession: T29343
probable RNA helicase - N;Alternate names: prote
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A; Residues: 1-305 < BAD>
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A;Title: Identification and characterisation of a A:Reference number: JC4525; MUID:96125212
A;Accession: JC4525
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A; Introns: 59/2; 106/2; 178/2
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protein DKFZp586A0419.1
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Pred. No. 0.77;
3; Mismatches
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A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-698, 'PSOSRRDWQSA' <SUK>
A;Cross-references: EMBL:AF083255; NID:g3435311; PID:g3435312; PIDN:AAC32396.1
C;Superfamily: ATP-dependent RNA helicase DBP1
C;Superfamily: ATP-dependent RNA helicase DBP1
C;Keywords: ATP, DEAD box; nucleotide binding; P-loop
F;178-185/Region: nucleotide-binding motif A (P-loop)
F;284-289/Region: nucleotide-binding motif B
F;284-289/Region: nucleotide-binding motif B
C;Species: Bombyx mori (silkworm)
C;Date: 19-May-1995 #sequence_revision 21-Jul-1995 #text_change 09-Sep-1997
C;Accession: S52714
R;Garel, A.A.; Deleage, G.G.; Prudhomme, J.J.
                                                                                                                       RESULT
S52714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hypothetical protein W03G1.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 29-Oct-1999
C;Accession: T33997
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submitted to the EMBL Data Library, August 1998
A;Description: A novel human cDNA homologous to RNA helicase genes
A;Reference number: 217605
A;Accession: T13148
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C:Date: 11-Jun-1999 #sequence_revision 18-Aug-2000 #text_change 19-
C:Accession: T08745; T13148
R:Wambutt, R.; Heubner, D.; Mewes, H.W.; Gassenhuber, J.; Wiemann, submitted to the Protein Sequence Database, March 1999
A:Reference number: Z16471
A:Accession: T08745
                                                                                                                                                                                                                                                                                                                                                                                                                              A; Gene: CESP:WU:
A; Map position:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R:Pauley, A.; Scheet, P.; Harper, M. submitted to the EMBL Data Library, February A;Description: The sequence of C. elegans cos A;Reference number: Z21454
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A; Residues: 455-819 <WAM>
A; Cross-references: EMBL: ALO50096; PIDN: CAB43268.1
A; Experimental source: adult uterus; clone DKF2p580
                                                                                              sericin1B -
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A; Residues: 1-471 < PAU>
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Date: 11-Jun-1999 #sequence_revision 18-Aug-2000 #text_change 19-Jan-2001
Accession: T08745; T13148
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34.1%;
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submitted to the EMBL Data i
A;Description: Structure and
A;Reference number: S52714
A;Accession: S52714
A;Status: preliminary
                                                                                                                                                              neutrophil protein - pig (fragment)
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 18-Jan-1991 #sequence_revision 18-Jan-1991 #text_change 05-Nov-1999
C:Accession: A35419
R:Bellavite, P.; Bazzoni, F.; Cassatella, M.A.; Hunter, K.J.; Bannister, J.v Blochem. Biophys. Res. Commun. 170, 915-922, 1990
A:Title: Isolation and characterization of a cDNA clone for a novel serine-r A; Reference number: A35419; MUID:90343818
A; Accession: A35419
                                                                                                                                                                                                                                                                                                                                  RESULT
A35419
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A;Start codon: GTG
C;Superfamily: glycine-rich cell wall structural
C;Superfamily: glycine-rich cell wall structural
C;Keywords: surface antigen
F;1-29/Domain: signal sequence #status predicted
F;30-174/Product: variant surface protein vlpB #s
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A;Title: Molecular basis of Mycoplasma surface antigenic variation: a A;Reference number: S18651; MUID:92097525
A;Accession: S18654
                                                                                    A;Molecule type: mRNĀ
A;Residues: 1-284 <BEL>
A;Cross-references: GB:M55701; NID:g164672;
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A; Residues: 1-1217 <GAR>
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A; Residues: 1-174 < YOG>
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                                                                                                                                             A; Status: preliminary
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                Score 69; DB Pred. No. 1.8;
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                                                                                        PIDN: AAA63449.1;
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Job time: 89 sec
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C;Accession: A34615

R;Haydock, P.V.; Dale, B.A.
DNA Cell Biol. 9, 251-261, 1990
A;Title: Filaggrin, an intermediate filament-associated A;Reference number: A34615; MUID:90274870
A;Accession: A34615
                                                                                                                                                                                                                                                                                R;Resing, K.A.; Walsh, K.A.; Haugen-Scofield, J.; Dale, B.A. J. Biol. Chem. 264, 1837-1845, 1989
A;Title: Identification of proteolytic cleavage sites in the A;Reference number: A31488; MUID:89109207
A;Accession: A31488
                                                                                                                                                                                C;Superfamily: unassigned calmodulin-related
C;Keywords: EF hand; epidermis
                                                                                                                                                                                                                                                                                                                                                                       filaggrin - mouse
C;Species: Mus musculus (house mouse)
C;Date: 20-Jul-1989 #sequence_revision 20-Jul-1989 #text_change 26-May-2000
C;Accession: A31488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: GB:M21759; NID:g204143; PIDN:AAA41161.1; PID:g204144 A;Note: the authors translated the codon GAA for residue 568 as Gln C;Superfamily: unassigned calmodulin-related proteins; calmodulin repeat homology C;Keywords: EF hand; epidermis
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 29-Jun-1990 #sequence_revision 09-Oct-1992 #text_change 04-Feb-2000
                                                                                                                                                                                                                        A; Molecule type: protein A; Residues: 1-254 < RES>
                                                                                                                                                                                                                                                                 A; Status: preliminary
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A; Residues: 1-625 <HAY>
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Pred. No. 1.9;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-MAY-2000 (Rel. 39, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
NK-TUMOR RECOGNITION PROTEIN (NATURAL-KILLER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAY-2000
20-AUG-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                         MGD; MGI:97346; Nktr.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE-93133824;
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                                                                                                                                                                    1 STGHSGSQHSHTTTQGRS---DASRGSSGSRSTSRETRDQEQS----GDGSRHSGS
                                                                                                                                                            SSGRSGSKSSRSRSSSRSYTRSRSRSLPTSRSLSRSPSSRSHSPNKYSDGSQHSRS
                                           -1992 (Rel.
-1992 (Rel.
-1997 (Rel.
r SURFACE AN'
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requires a license agreement (See
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                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                 pro_isomerase;
                                                                                                   STANDARD;
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                                            ANTIGEN
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llinger S., Roder J., Frey J.,
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39.3%;
                                                        Last sequence u
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                                                                            Created)
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PPIASE, CYCLOPHILIN-TYPE.
ARG/LYS-RICH (BASIC).
ARG/LYS-RICH (BASIC).
ARG/LYS-RICH (BASIC).
ARG/SER-RICH.
                                            PRECURSOR
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                                                                                                                                                                                                      Pred. No. 1.6
6; Mismatches
                                                                                                                                                                                                                  Score 73.5;
Pred. No. 1
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ARG-SER TANDEM REPEAT-RICH.
W; DF1173FF814B283E CRC64;
                                                                                                                                                                                                                                                                                                ARG/SER-RICH.
                                                                                                   PRT;
                                                      on update)
                                            (VLPB PROLIPOPROTEIN)
                                                                                                   174
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                                                                                                                                                                                                                  6;
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          group; .Mollicutes;
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Murinae; Mus
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Best Local
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                             STRAIN-ATCC 28583 / FL100;
Lalo D., Carles C., Sentenac
Submitted (MAY-1993) to the F
                                                                                                                                 01-OCT-1993 (Rel. 27, Cre
01-JUN-1994 (Rel. 29, Las
15-JUL-1998 (Rel. 36, Las
SUPPRESSOR PROTEIN SRP40.
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SEQUENCE
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LIPID
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                                                                                        Saccharomyces cerevisiae (Baker's yeast).

Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              set of divergent genes undergo spontaneous mutation of coding regions and 5' regulatory sequences."; EMBO J. 10:4069-4079(1991).
  SEQUENCE FROM N.A. MEDLINE-94205265;
                                                                                                                                                                                                                                                                                                                                                  REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yogev D., Rosengarten R., Watson-Mckown R., Wise K.S.;
"Molecular basis of Mycoplasma surface antigenic variation: a novel
                                                              SEQUENCE FROM
                                                                                                                        SRP40 OR YKR092C OR YKR412A.
                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=92097525; PubMed=1721868;
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MISCELLANEOUS: THE NUMBERS OF REPEATS CAN VARY AND IS ONE OF
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29, Last sequence update;
36, Last annotation updat
   PubMed=8154186;
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43.1%;
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7 X 12 AA TANDEM REPEATS.
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                               EMBL/GenBank/DDBJ
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Pred. No. 0.5;
7; Mismatches
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VARIANT SURFACE ANTIGEN B.
                                                                                                                                                                                   PRT;
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0.5;
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088573;

20-AUG-2001 (Rel. 40, C

20-AUG-2001 (Rel. 40, I

20-AUG-2001 (Rel. 40, I
                                                                                                                                                                                                                the European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases. -- SUBCELLULAR LOCATION: NUCLEAR (POTENTIAL). -- SIMILARITY: BELONGS TO THE AF4 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (Mouse).
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EMBL; X73541; CAA51946.1; -.
EMBL; X23317; CAA82171.1; -.
PIR; S38170; S38170.
SGD; S0001800; SRP40.
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reast 9:1349-1354(1993).
reast 9:1349-1354(1993).
reast 9:1349-1354(1993).
SUBUNIT AC40 OF DNA DEPENDANT RNA POLYMERASE I AND III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bou G., Esteban P.F., Baladron V., Gonzalez G.A., Cantalejo J. Remacha M., Jimenez A., del Rey F., Ballesta J.P.G., Revuelta cerevisiae chromosome XI contains the UBI2 and MPL1 genes and the complete sequence of a 15.820 by segment of Saccharomyces
                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-Thymus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM
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                                                                                                                                                  MGI:1100819;
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r protein;
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3., Revuelta J.L.;
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                                                                                                                                                                          Repeat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-92249775; PubMed-1577277; Zahler A.M., Lane W.S., Stolk J.A., Roth M.B.; "SR proteins: a conserved family of pre-mRNA spl Genes Dev. 6:837-847(1922).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-FEB-1995
01-FEB-1995
20-AUG-2001
                                                                                                                                                                                                                                                                       Pfam; PF00076; rrm; 2. SMART; SM00360; RRM; 2.
                                                                                                                                                                                                                                                                                                                                                                                                     use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entitles requires a license agreement.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a between the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict the European Bioinformatics Institute.
                                                                                                                                                                                                                                 PROSITE; PS00030; RRM_RNP_1;
                                                                                                                                                                                                                                                                                                                                                                                           entities requires a license agreement or send an email to license@isb-sib.cl
                                                                              SEQUENCE
                                                                                                                                                                                                             mRNA processing; mRNA splicing;
                                                                                                                                                                                                                                                                                                               InterPro; IPR000504; RRM
                                                                                                                                                                                                                                                                                                                                   MIM; 601940;
                                                                                                                                                                                                                                                                                                                                                     EMBL; L14076; AAA36649.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zahler A.M., Neugebauer K.M., Stolk J. "Human SR proteins and isolation of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A., AND PARTIAL S
MEDLINE 93309435; PubMed 8321209;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: A PROBABLE ROLE IN ALTERNATIVE SPLICE SITE SELECTION DURING PRE-MRNA SPLICING. SUBCELLULAR LOCATION: NUCLEAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY:
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                                                                                                                                                                                            Phosphorylation.
                                                                                                                                                                                                                                                                                                                                                                                       an email to license@isb-sib.ch).
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BELONGS TO THE SR FAMILY OF
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. 40, Last annotation update)
ARGININE/SERINE-RICH 4 (PRE-MRNA SPLICING FACTOR
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RNA-BINDING (RRM):
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Q49536; 005665;
01-NOV-1997 (Rel
01-NOV-1997 (Rel
15-DEC-1998 (Rel
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CARBOHYD
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Mammalia; Eutheria;
Bovidae; Bovinae; F
NCBI_TaxID=9913;
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DMP1_BC
Q95120;
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                                                                                                                                                                                                                                                                                                                                                                  entities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     phosphoprotein gene.";
J. Dent. Res. 76:754-760(1997).
-i- FUNCTION: COULD BE INVOLVED IN
EXTRACELLULAR MATRIX AND IN DE
-i- TISSUE SPECIFICITY: EXPRESSED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=97263952; PubMed=9109824;
Hirst K.L., Ibaraki-O'Connor K., Young M.F., Di
"Cloning and expression analysis of the bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bos taurus (Bovine).
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30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
DENTIN MATRIX ACIDIC PHOSPHOPROTEIN 1 PRECURSOR
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IN LIVER AND SKIN.
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16; Conserv
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 SURFACE
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Eutheria; Cetartiodactyla;
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(Rel. 35, Created)
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PRECURSOR (VLPD PROLIPOPROTEIN).
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N-LINKED (GLORAC...) (POTENTIAL).
N-LINKED (GLONAC...) (POTENTIAL).
N-LINKED (GLORAC...) (POTENTIAL).
N-LINKED (GLORAC...) (POTENTIAL).
CELL ATTACHMENT SITE (POTENTIAL).
M; 9BFA9A74F6450865 CRC64;
                                                                                                                                                               Score 67; DB
Pred. No. 2.6;
11; Mismatches
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Best Local S
Matches 21
                                                                                                                                              NRG2_RAT STANDARD; PRT; 868 AA.
03556; 035570; 035571; 035572; 035073;
15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
PRO-NEUTREGULIN-2 PRECURSOR (PRO-NRG2) [CONTAINS: NEUTREGULIN-2
PRO-NEUTREGULIN-2 PRECURSOR (PRO-NRG2) [CONTAINS: NEUTREGULIN-2
(NEURAL-AND_THYMUS-DERIVED ACTIVATOR FOR ERBB KINASES) (NTAK)]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHAIN
LIPID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and find a license arrows.
Eukaryota; Metazoa; Mammalia; Eutheria; NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
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Bacteria; Firmicutes; Bacillus/Clostridium group; Mollicutes; Mycoplasmataceae; Mycoplasma.
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hyorhinis.";
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                                                                                        Rattus norvegicus (Rat)
                                                                                                                           NRG2 OR NTAK.
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"Increased structural and combinatorial diversity in an extended
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANCHOR (PROBABLE)
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email to license@isb-sib.ch).
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                               Chordata;
Rodentia;
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N-ACYL DIGLYCERIDE (PROBABLE).
7 X 12 AA TANDEM REPEATS.
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Pred. No. 0
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                            Craniata; Vertebrata; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ဌ
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InterPro; InterPro;

IPR000561; IPR003006;

Ig_MHC. Ig_c2.

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MEDLINE-97311397; Put
Chang H., Riese D.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        [1]
SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                          or send an
                                                                                                                                                                                                                                                                                                                            use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This
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                                                                                                                                                                                                                                                                                              entities
                                                                                                                                                                                                                                                                                                                                                                                                     the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                              between
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Biochem. 122:675-680(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Higashiyama S., Horikawa M., Yamada K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nature 387:509-512(1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DIMERIZATION (BY SIMILARITY).
DOMAIN: ERBB RECEPTOR BINDING IS EL
DOMAIN (BY SIMILARITY).
POMAIN (BY SIMILARITY).

PTM: PROTEOLYTIC CLEAVAGE CLOSE TO
PTM: PROTEOLYTIC CLEAVAGE RELEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY).

SIMILARITY: CONTAINS 1 EGF-LIKE DOMAIN.
SIMILARITY: CONTAINS 1 IMMUNOGLOBULIN-LIKE C2
SIMILARITY: BELONGS TO THE NEUREGULIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADRENAL GLAND, OR TESTIS.

DEVELOPMENTAL STAGE: IN THE EMBRYO, EXPRESSED IN THE BRAIN OF E11.5 EMBRYOS WHERE IT IS FOUND IN THE TELENCEPHALON, BUT NOT THE HINDBRAIN. NOT FOUND IN THE HEART. IN THE ADULT, FOUND IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE SPECIFICITY: EXPRESSED IN MOST PARTS OF THE BRAIN, ESPECIALLY THE OLFACTORY BULB AND CREBBELLUM WHERE IT CALLIZES IN GRANULE AND PURKINJE CELLS, IN THE HIPPOCAMPUS, FOUND IN THE GRANULE CELLS OF THE DENTRATE GYRUS. IN THE BASAL FOREBRAIN, FOUND IN THE CHOLINERGIC CELLS. IN THE HINDBRAIN, WEAKLY DETECTABLE IN THE MOTOR TRIGEMINAL NUCLEUS. NOT DETECTED IN THE HYPOTHALAMUS. ALSO, FOUND IN THE LIYER AND IN THE THYMUS. NOT DETECTED IN HEART,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SPLICING. THE ALPHA-
DOMAIN.
TISSUE SPECIFICITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A PROTEOLYTICALLY RELEASED SOLUBLE GROWTH FACTOR FORM. THE MEMBRANE-BOUND FORM DOES NOT SEEM TO BE ACTIVE (BY SIMILARITY). ALTERNATIVE PRODUCTS: AT LEAST 7 ISOFORMS; NTAK-ALPHA1 (STOWN HERE), NTAK-ALPHA2A, NTAK-ALPHA2B/NTAK-ALPHA2-1P, NTAK-BETA, NTAK-BE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FUNCTION: DIRECT LIGAND FOR EXBB3 AND ERBB4 TYROSINE KINASE RECEPTORS. CONCOMITANTLY RECRUITS ERBB1 AND ERBB2 CORECEPTOR RESULTING IN LIGAND-STIMULATED TYROSINE PHOSPHOYLATION AND ACTIVATION OF THE ERBB RECEPTORS. MAY ALSO PROMOTE THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EXTERNAL FACE LEADS TO FORM (BY SIMILARITY). PTM: EXTENSIVE GLYCOSYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HETERODIMERIZATION WITH THE EGF RECEPTOR. SUBCELLULAR LOCATION: EXISTS AS AN TYPE I MEMBRANE PROTEIN
D89995; BAA23344.1; -.
; D89996; BAA23345.1; -.
; D89997; BAA23346.1; -.
; D89998; BAA23347.1; -.
; D89998; BAA23347.1; -.
; D89998; BAA23348.1; -.
; TPTC) IPRO00561; EGF-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOMAIN: THE CYTOPLASMIC DOMAIN NOT TRAFFICKING AND PROTEOLYTIC PROCESSING INVOLVES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BRAIN AND THYMUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SWISS-PROT entry is copyright. It is produced through
                                                                                                                                                                                                                                                          requires a license agreement (s
an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                   the Swiss Institute of Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EXTENSIVE GLYCOSYLATION PRECEDES THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , Riese D.J. II, Gilbert W., Stern for ErbB-family receptors encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T., Miyagawa J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THE ALPHA-TYPE AND BETA-TYPE DIFFER
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.J. II, Gilbert
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neuregulin-like
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SERI OR SER-1.
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CHAIN
  Galleria mellonella (Wax moth).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Di
Pyraloidea; Pyralidae; Galleriinae; Galleriā.
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SMART; SM00408; IGC2; 1.
PROSITE; PS00022; EGF_1; 1.
PROSITE; PS01186; EGF_2; 1.
Growth factor; EGF-11ke domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR002154; Neureg
Pfam; PF00008; EGF; 1.
Pfam; PF00047; ig; 1.
Pfam; PF02158; Neuregulin;
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                                                                                                                                                                                                                                                 NGFFGORCLEKLPLILYMDDPKOKHLGFELKE -> VGYTG
DRCQOFAMVNFSK (IN ISOFORM NTAK-BETA).
MISSING (IN ISOFORM NTAK-ALPHA2A AND
ISOFORM NTAK-ALPHA2B).
HLGFELKEAEELYQKRVLTITGICVA -> SVLWDTPGTGV
SSSQWSTSPSTLDLN (IN ISOFORM NRG2-ALPHA).
MISSING (IN ISOFORM NRG2-ALPHA).
S -> F (IN REF. 2).
R -> H (IN REF. 2).
                                                                                                                                                                                         7;
                                                                                                                                                                                                                                                                                                                                        N-LINKED (GLCNAC. . .) (POTENTIAL).
N-LINKED (GLCNAC. . . ) (POTENTIAL).
MISSING (IN ISOFORM NRG2-BETA).
PLV -> FFF (IN ISOFORM NTAK-ALPHA2-1P).
C -> G (IN ISOFORM NTAK-GAMMA).
MISSING (IN ISOFORM NTAK-GAMMA).
NGFFGQNCLEKLPLRLYMPDPKQ -> VGYTGDRCQQFAMV
NRS (IN ISOFORM NRG2-BETA).
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BY SIMILA
BY SIMILA
BY SIMILA
BY SIMILA
N-LINKED
N-LINKED
N-LINKED
                                                                                                                                                                                                    Score 66; DB Pred. No. 5.8;
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CYTOPLASMIC (POTENTIAL).
IG-LIKE C2-TYPE DOMAIN.
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I-LINKED (GLCNAC. . .) (POTENTIAL).
I-LINKED (GLCNAC. . .) (POTENTIAL).
I-LINKED (GLCNAC. . .) (POTENTIAL).
I-LINKED (GLCNAC. . .) (POTENTIAL).
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ILSING (IN ISOFORM NRG2-BETA).
ILSING (IN ISOFORM NRG2-BETA).
INSING (IN ISOFORM NRGA-GLMAA).
                                                 otation update) (FRAGMENT).
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-> H (IN REF. 2).
3C7D4D94DBE64DE2 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY.
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                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                         22;
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           Glossata; Ditrysia;
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TOP1_DROME
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Best Local Similarity 40.8
Conservative
                                                                                                                                                                      SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

MEDITME=93117086; PubMed=1335568;

Hsieh T.-S., Brown S.D., Huang P., Fostel

"Isolation and Characterization of a gene
I in Drosophila melanogaster.";

I in Drosophila melanogaster."
                                                                                                                                                                                                                                                                                                                                                            TOP1_DROME STANDARD
P30189; Q9YXW6;
01-APR-1993 (Rel. 25, C
01-APR-1993 (Rel. 25, L
20-AUG-2001 (Rel. 40, L
DNA TOPOISOMERASE I (EC
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SEQUENCE
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Zurovec M., Sehnal F., Scheller K., Kumaran A.K.;

"Silk gland specific cDNAs from Galleria mellonella L."

Insect Biochem. Mol. Biol. 22:55-67(1992).

-!- FUNCTION: PROVIDES THE SILK FIBROIN THREAD MITH A SACTS AS A CEMENT BY STICKING SILK THREADS TOGETHER.

-!- SUBCELLULAR LOCATION: SECRETED.
               STRAIN=BERKELEY;
MEDLINE=20196006;
                                                                                early embryonic development furrows.";
                                                                                                         MEDLINE=96354910; PubMed=8769417;
Zhang C.X., Lee M.P., Chen A.D.,
"Isolation and characterization o
                                                                                                                                                    STRAIN-OREGON-R;
                                                                                                                                                                                                                                                                                  Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.
NCBI_TaxID=7227;
                                                                                                                                                                                                                                                                                                                        Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the European Bioinformatics Institute. The use by non-profit institutions as long a modified and this statement is not removed. entities requires a license agreement (See )
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[1]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                s requires a license agreement (See http://www.isb-sib.ch/announce/an email to license@isb-sib.ch).
                                                                   Biol. 134:923-934(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IPR000087; Collagen.
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PubMed=10731132;
ker S.E., Holt R.A.,
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0, Last annotation updat
(EC 5.99.1.2).
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40.8%;
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                                                                                              , Brown S.D., Hsieh T.-S.; of a Drosophila gene essen formation of cortical clear
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Evans

Gocayne

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RA Durbin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann W.,
RA Fosler C., Gabriellan A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Glodek A., Gong F., Gorrell J.H., Wei M.-H., Ibasser K.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hastin D., Houston K.A., Howland T.J., Wei M.-H., Ibaswam C.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibaswam C.,
RA Haston D., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.L.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Mentov G., Milshina N.V., Mobarry C., Morris J., McPherson D.L.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Rainert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
RA Williams S.M., Woodseg T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L.,
RA Zheng X.H., Zhong F.N., Zhong W., Zhon G., Zhao Q., Zheng L.,
RA Zheng R.A., Wyers E.W., Rubin G.M., Venter J.;
The genome sequence of Drosophila melanogaster.";
CC --- Fillone 287:2185-2195(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottlier P.,
Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
Cherry J.M., Cawley S., Davies M., Davies P.,
Cherry J.M., Cawley S., Davies M., Davies P.,
Cherry J.M., Cawley S., Davies M., Cherry C., Ferriera S., Fleischmann W.
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                                                                                                                                                                                                                               EMBL; U80064; AAC24158.1; -.
EMBL; AE003498; AAF48440.1;
PIR; S35521; S35521.
HSSP; P11387; 1A35.
FlyBase; FBgn0004924; Topl.
                                                                                                                                                                                                                                                                                                                                                                                                            entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                     PRINTS;
                                                                                                                                                                             Pfam; PF01028; Topoisomerase_I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified and this statement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the European Bioinformatics Institute.
                                                                              Isomerase;
                                                                                                                                                                                                     InterPro; IPR001631; Top1smerse_I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FUNCTION: THE REACTION CATALYZED BY TOPOISOMERASES LEADS TO CONVERSION OF ONE TOPOLOGICAL ISOMER OF DNA TO ANOTHER. CATALYTIC ACTIVITY: ATP-INDEPENDENT BREAKAGE OF SINGLE-STRAN DNA, FOLLOWED BY PASSAGE AND REJOINING.

MISCELLANEOUS: EUKARYOTIC TOPOISOMERASE I AND II CAN RELAX B MEGATIVE AND POSITIVE SUPERCOILS, WHEREAS PROKARYOTIC ENZYME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RELAX ONLY NEGATIVE SUPERCOILS.
MISCELLANEOUS: WHEN A TOPOISOMERASE TRANSIENTLY BREAKS A DNA BACKBONE BOND, IT SIMULTANEOUSLY FORMS A PROTEIN-DNA LINK, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY: BELONGS TO THE EUKARYOTIC TYPE I TOPOISOMERASE FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WHICH A TYROSYL OXYGEN IN THE ENZYME IS JOINED TO AT ONE END OF THE ENZYME-SEVERED DNA STRAND.
                                                                                                                                                                                                                                                                                                                                                             M74557; AAA28951.1; -.
                                                                                                                                SM00435; TOPEUc;
                                                                                                                                                     PR00416;
                                                                                                         PS00176;
; Topoisomerase;
32 39
40 198
930 930
                                                                                                                                                        EUTPISMRASEI.
                                                    TOPOISOMERASE_I_EUK; omerase; DNA-binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              institutions as long as its content atement is not removed. Usage by an
     SER-RICH.
     CLEAVAGE
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01-0CT-1996 (Rel. 34, C
01-0CT-1996 (Rel. 34, L
15-JUL-1998 (Rel. 36, L
HYPOTHETICAL 54.9 KDA F
YNL124W OR N1888.
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CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                              de Antoni A., D Angelo M., Dal Pero F., Sartorello Pallavicini A., Lanfranchi G., Valle G.; "The DNA sequence of cosmid 14-13b from chromosome Saccharomyces cerevisiae reveals an unusually high overlapping open reading frames."; Yeast 13:261-266(1997).
                                                                                                                                                   EMBL; Z69382; CAA93381.1;
EMBL; Z71400; CAA96005.1;
SGD; S0005068; YNL124W.
                                                                                                                                                                                                                                                                                                                                                   "A 43.5 kb segment of yeast chromosome XIV, which contains MFA2, MEP2, CAP/SRV2, NAM9, FKB1/FPR1/RBP1, MOM22 and CPT1, predicts and contains deaminase gene and 14 new open reading frames.";
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                                                                                                                          Hypothetical protein. SEQUENCE 492 AA; 54949
                                                                                                                                                                                                         entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                     the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for commodified and this statement is not removed.
                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                      adenosine deaminase gene and
Yeast 11:1195~1209(1995).
                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=96109932; PubMed=8619318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE-97245296; PubMed-9090055;
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Saccharomycetales;
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                        1 STG-HSGSQHSHTTTQGRSDASRGSSGSR--STSRETRDQEQSGD
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STGLGSGSSESESDSGSDSDSDSDSGSSGSEDDSADQDVEGEDEGGD
                                                    17; Conservative
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972 AA;
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Last annotation update)
PROTEIN IN SPC98-TOM70
                                                                                                                          MW;
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Pred. No. 4.6;
8; Mismatches
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-> SSS (IN REF. 3).
-> Q (IN REF. 3).
3764B8BDEEFA30CD CRC64;
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Murphy L., Harris D., Barrell B.G., Rajandr Submitted (AUG-1997) to the EMBL/GenBank/DD -!- SIMILARITY: BELONGS TO THE GAS1 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Schlzosaccharomyces pombe (Fission yeast).
Eukaryota; Fungi; Ascomycota; Schlzosaccharomycetes;
Schlzosaccharomycetales; Schlzosaccharomycetaceae;
Schlzosaccharomyces.
                                  Rothnagel J.A., Mehrel T., Idler W.W., Roop D. "The gene for mouse epidermal filaggrin precur characterization, expression, and sequence of
                                                                                          SEQUENCE FROM N.A.
MEDLINE-88058903; PubMed-3680218;
                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                 01-JUL-1989
15-JUL-1999
                                                                                                                                                                                                                                                                                                                      P11088;
01-JUL-1989
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  J. 'Biol.
                                                                                                                                                         NCBI_TaxID=10090;
                                                                                                                                                                                                                 Mus musculus (Mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
nes 19; Conserv
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Chem.
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(Rel. 36, Last sequence update)
(Rel. 36, Last annotation update)
L 53.7 KDA PROTEIN C11E3.13C IN CHROMOSOME
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o the EMBL/GenBank/DDBJ databas
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Pred. No. 4.8;
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-- FUNCTION: AGGREGATES KERATIN INTERNEDIATE FILAMENTS AND PROMOTES DISULTIDE-BOND FORMATION AMONG THE INTERNEDIATE FILAMENTS DURING TERMINAL DIFFERENTIATION OF MAMMALIAN EPIDERMIS.

-- IPTM: FILAGGRIN IS INITALLY SYNTHESIZED AS A LARGE, INSOLUBLE, HIGHLY PHOSPHORYLATED PRECURSOR CONTAINING MANY TANDEM COPIES OF 248 AA, WHICH ARE NOT SEPARATED BY "LARGE LINKER". THE PRECURSOR IS DEPOSITED AS KERATOHYALIN GRANULES. DURING TERMINAL PRECURSOR IS DEPOSITED AS KERATOHYALIN GRANULES.
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Mol. Cell. Biol. 13:613-625(1993).
-i- FUNCTION: AGGREGATES KERATIN INTERMEDIATE FILAMENTS AND PROMOTES
DISULFID-BOND FORMATION AMONGST THE INTERMEDIATE FILAMENTS DURING
         Mammalia;
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Markova N.G., Marekov L.N., Chipe
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II (BY SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C.C., Gan S.-Q.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BY SIMILARITY).
                                                                                                                                                                      797
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     Hominidae;
                                                                                                               update)
                                                                                             update)
                                                                                                                                                                                                                                                                                                                                                                Length 1218;
                                                                                                                                                                                                                                                                                                                                Indels
                        Euteleostom1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HAVE BEEN FOUND
OF FILAGGRIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Idler W.W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Calcium-binding
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                                                                                                                                                                                                                                                                                                                                Gaps
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Query Match
Best Local S
Matches 41
                                                                            Query Match
Best Local
                                                              Matches
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TISSUE-PLACENTA;

MEDLINE-91064347; PubMed-2248957;

Gan S.Q., McBride W.O., Idler W.W., Markova N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q01212 PRELIMINARY;
Q01212; Q03840;
Q1-NOV-1996 (TrEMBLrel.
                                                                                                                                          Intermediate filament NON_TER 1 SEQUENCE 1084 AA;
                                                                                                                                                                                                       InterPro; IPR003 PRINTS; PR00487;
                                                                                                                                                                                                                                                                                                                                                                                                                 Biochemistry 29:9432-9440(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; 
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1996 (TrEMBLrel. 01, 01-NOV-1996 (TrEMBLrel. 01, 01-JUN-2001 (TrEMBLrel. 17,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; M60502; AAA63248.1; -.
InterPro; IPR003303; Filaggrin.
PRINTS; PR00487; FILAGGRIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE=91064347; Gan S.Q., McBride
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9606;
                                                                                                                                                                                                                                       EMBL; M60503; AAA63243.1; -.
EMBL; M60501; AAA63243.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                      -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILAGGRIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Biochemistry 29:9432-9440(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Organization, structure, and polymorphisms
 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193
                               H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PROBABLY FLYQVST). THE PRECURSOR IS DEF
GRANULES. BY MEANS OF DEPHOSPHORYLATION
FILAGGRIN IS FORMED.
                                                                                                                                                                                                                                                                                                    INSOLUBLE, HIGHLY PHOSPHORYLATED PRECURSOR CONTAINING MANY TANDEM COPIES OF 317 AA, WHICH ARE SEPARATED BY A SHORT LINKER SEQUENCE (PROBABLY FLYQVST). THE PRECURSOR IS DEPOSITED AS KERATOHYALIN
                                                                                                                                                                                                                                                                                                                                                  FUNCTION: FILAGGRIN AGGREGATES KERATIN INTERMEDIATE FILAMENTS AND PROMOTES DISULFID-BOND FORMATION AMONGST THE INTERMEDIATE FILAMENTS DURING TERMINAL DIFFERENTIATION OF MAMMALIAN EPIDERMIS. MISCELLANEOUS: FILAGGRIN IS INITIALLY SYNTHESIZED AS A LARGE,
                STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SGHSGSHHSHTTSQGRSDASRGQSGSRSASRQTHDQEQSGDGSRHSGS
STGHSGSHHSHTTSQGRSDASHGTSGSRSASRETHNEEQSGDGSRHSGS
                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                        IPR003303; Filaggrin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                797 AA;
                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                          Polyprotein; Developmental protein; Keratin;
                                                                                                                                                                                                         FILAGGRIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PubMed=2248957;
O.W., Idler W.W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85176 MW;
                                                                            86.1%;
83.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86.5%;
85.4%;
                                                                                                                                          115271 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Idler W.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score
Pred.
                                                           Pred. No. 2.2
                                                                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60E6184763BDA86B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ore 218; DB 4;
ed. No. 1.3e-18;
Mismatches 4
                                                                                                                                            80C4640B8D5A362D CRC64
                                                                          217;
No. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Markova
                                                                            DB 4;
2.2e-18;
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of the human profilaggrin
                                                              4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                the human
                                                                                          Length 1084;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 797;
                                                                                                                                                                                                                                                                                       PROTECLYTIC
                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                profilaggrin
                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                              Gaps
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RESIDENCE OF THE PROPERTY OF T
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Best Local S
Matches 40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
FILAGGRIN (PROFILAGGRIN) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q03838;
Q03838;
                     EMBL;
                                                                                                                                                                                                                                                                                                                                            MEDLINE-91255199; PubMed-2043621;
Gan S.-Q., McBride O.W., Idler W.W., Markova N., Steinert "Organization, structure, and polymorphisms of the human p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (OCT-2000) to the EMBL; AL356504; CAC13171.1; Interpro; IPR003303; Filagg PRINTS; PR00487; FILAGGRIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-2001 (TrembLrel. 16, 01-MAR-2001 (TrembLrel. 16, 01-JUN-2001 (TrembLrel. 17, DJ14N1.1.2 (PROFILAGGRIN 3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FLG.
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Homo sapiens (Human).
Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                      Biochemistry 30:5814-5814(1991)
                                                                                                                                                                                                                                                                                                                                gene."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Biochemistry 29:9432-9440(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-91064347;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-PLACENTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
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  InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                            REVISIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Organization, structure,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            518
         INSOLUBLE, HIGHLY PHOSPHORYLATED PRECURSOR CONTAINING MANY TANDEM COPIES OF 324 AA. THE PRECURSOR IS DEPOSITED AS KERATOVYALIN GRANULES. DURING TERMINAL DIFFERENTIATION IT IS DEPHOSPHORYLATED.

### 15 # 160499; AAA63246.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N
                                                                                                                                                                                FUNCTION: FILAGGRIN AGGREGATES KERATIN INTERMEDIATE FILAMENTS PROMOTES DISULFID-BOND FORMATION AMONGST THE INTERMEDIATE FILAMENTS DURING TERMINAL DIFFERENTIATION OF MAMMALIAN EPIDERN POLYMORPHISM: A NUMBER OF PROFILAGGRIN ISOFORMS HAVE BEEN FOUL WHICH DIFFER BOTH IN SEQUENCE AND IN THE NUMBER OF FILAGGRIN WHICH DIFFER BOTH IN SEQUENCE AND IN THE NUMBER OF FILAGGRIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         McBride
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      798 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PubMed=2248957;
le O.W., Idler W.W., Markov
ructure, and polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84773 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Filaggrin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL/GenBank/DDBJ
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Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 213; DE
Pred. No. 5.26
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                END) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Craniata; Vo
Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F923DDA8D1290805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Markova N., Sirphisms of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          465
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4;
.2e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ą
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 798;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CRC64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Steinert P.M.;
he human profil
                                                                                                                                                                                    HAVE BEEN FOUND OF FILAGGRIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              profilaggrin
                                                                                                                                                                                                                                                                                                                                               profilaggrin
                                                                                                                                                                                                                                                                                                                                                                       P.M.;
                                                                                                                                                                                                                                EPIDERMIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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200 SERVICE STREET SERVICES SE
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Best Local S
Matches 39
                        Polymorphism.
PROPEP
CHAIN 29
PROPEP 46
CHAIN 47
CA_BIND 1
CA_BIND 6
NON_TER 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REPEATS:
EMBL; L01089;
EMBL; L01090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                domain at the amino terminus.;

J. Biol. Chem. 267:23772-23781(1992).

1- FUNCTION: AGGREGATES KERATIN LIFERMEDIATE FILAMENTS AND PROMOTES DISULETD-BOND FORMATION AMONGST THE INTERNEDIATE FILAMENTS DURING TERMINAL DIFFERENTIATION OF MAMMALIAN EPIDERMIS.

1- PTM: FILAGGRIN IS INITIALLY SYNTHESIZED AS A LARGE, INSOLUBLE, HIGHLY PHOSPHORYLATED PRECURSOR CONTAINING MANY TANDEM COPIES OF 324 AA. THE PRECURSOR IS DEPOSITED AS KERATOHYALIN GRANULES. DURING TERMINAL DIFFERENTIATION IT IS DEPHOSPHORYLATED & DURING TERMINAL DIFFERENTIATION THE PROPERTY AND TH
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Mammalia; Eutheria;
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Pfam; PF01023; S_100; 1.
PRINTS; PR00487; FILAGGRIN.
                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR002048; EF-hand.
InterPro; IPR003303; Filaggrin
InterPro; IPR001751; S100_CaBP
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                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                               PROSITE;
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Metazoa; Primates; (
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                                                                                                                                                                                                                                                                                            EF_HAND; UNKNOWN_1.
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Pred. No. 4.1e-18;
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Matches 38
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SEQUENCE FROM N.A.
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Arnaud M., Girbal Neuhauser E., Jo
Arnaud M., Girbal Neuhauser E., Jo
Submitted (JAN-1998) to the EMBL/6
EMBL, AF043380; AAC2359.1;
InterPro; IPR003303; Filaggrin.
PRINTS; PR00487; FILAGGRIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -1- SIMILARITY: TO OTHER EF-HAND CALCIUM BINDIN
SPECIFICALLY TO S-100/CABP LIKE PROTEINS.
EMBL; AL356504; CAC13172.1; -.
InterPro; IPR002048; EF-hand.
InterPro; IPR003303; Filaggrin.
InterPro; IPR001751; S100_CaBP.
Pfam; PF01023; S_100; 1.
PRINTS; PR00487; FILAGGRIN.
SMART; SM00054; EFh; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                        O75370 PRELIMINARY; PRT, O75370; O75370; O75370; O1-NOV-1998 (TrEMBLrel. 08, Last; O1-NOV-1998 (TrEMBLrel. 17, Last; EPIDERMAL FILAGGRIN (FRAGMENT).
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01-MAR-2001 (TrEMBLrel. 16,
01-JUN-2001 (TrEMBLrel. 17,
01-JUN-11, (PROFILAGGRIN 5'
                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID-9606;
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01-MAR-2001
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NON_TER 687 687
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Mammalia; Eutheria; Primates;
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Q9R744;
Q1-MAY-2000
01-MAY-2000
01-JUN-2001
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Hackbarth C.J., Kocagoz T., Kocagoz S., Chambers H.F.;
Point mutations in Staphylococcus aureus PBP 2 gene affect
penicillin-binding kinetics and are associated with resistance.";
Antimicrob. Agents Chemother. 39:103-108(1995).
EMBL; 125426; AAA74375.1;
InterPro; IPR001264; Transglycosyl.
InterPro; IPR001264; Transglycosyl.
InterPro; IPR001460; Transpeptdse.
Pfam; PF00915; Transglycosyl; 1.
ProDom; PP001895; Transglycosyl; 1.
ProDom; PD001895; Transglycosyl; 1.
ProDom; PD001895; Transglycosyl; 1.
ProDom; PD001895; Transglycosyl; 1.
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053724;

01-NOV-1996 (TrEMBLrel. 01,

01-NOV-1996 (TrEMBLrel. 17,

01-JUN-2001 (TrEMBLrel. 17,
Pinho M.G., Wu S., Ludovice A.M., Filipe S.R. Submitted (JAN-1999) to the EMBL/GenBank/DDBJ EMBL; Y17795; CAA76853.1; -
                                                                      SEQUENCE FROM N.A.
STRAIN-RUSA130;
                                                                                                                                                             Pinho M.G., de Lencastre H., Tomasz A.;
"Transcriptional analysis of the Staphylococcus binding protein 2.";
                                                                                                                                                                                                                                        STRAIN=COL, AND RUSA130; MEDLINE=99047551; PubMed
                                                                                                                                                                                                                                                                                                                            Bacteria; Firmicutes; Bacillus/Clostridium group; Bacillus/Staphylococcus group; Staphylococcus. NCBI_TaxID=1280;
                                                                                                                                                                                                                                                                                                                                                                                                       Staphylococcus aureus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         (TrEMBLrel. 13, Created)
(TrEMBLrel. 13, Last sequence update)
(TrEMBLrel. 17, Last annotation updatillin Binding PROTEIN 2).
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                                                                                                                                              180:6077-6081(1998).
                                                                                                                                                                                                                                        PubMed=9829914;
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Pred. No. 0.05
7; Mismatches
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Best Local
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"Whole genome sequencing of meticillin-resistant Staphylococcu: aureus.";
Lancet 357:1225-1240(2001).
EMBL; AP003133; BAB42543.1; -.
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01-JUN-2001
01-JUN-2001
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Q99U39;
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InterPro; IPR001460; Transpeptdse.
Pfam; PF00912; Transglycosyl; 1.
Pfam; PF009905; Transpeptldase; 1.
ProDom; PD001895; Transglycosyl; 1.
SEQUENCE 727 AA; 80426 MW; 4D4B
                                                                                                                                                                                                         01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
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Bacteria; Firmicutes; Bacillus/Clostridium group;
Bacillus/Staphylococcus group; Staphylococcus.
STRAIN-FRIEDLIN;
Ivens A.C., Murphy
                                                                                          Leishmania major.
Eukaryota; Euglenozoa;
NCBI_TaxID=5664;
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NCBI_TaxID=158879;
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                                                                                                                                                                                          KDA PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80366 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            32.1%;
44.7%;
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  Quail M.,
                                                                                                                     Kinetoplastida;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             , Hiramatsu K.;
of meticillin-resistant Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 81; DB
Pred. No. 0.05
7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4D4BA026A428C066 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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  Harris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81; DB 2;
No. 0.054;
                                                                                                                                                                                                                                                                                                             300
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                                                                                                                     Trypanosomatidae;
  D.,
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  Oliver
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 727;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kobayashi I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           T., Hattori
  Lawson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kanamori M.,
                                                                                                                     Leishmania
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
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RESULT
Q9V518
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RA Adams M.D., Cedniker S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Brandon R.C., Boyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Bellew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beesson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA George R.A., Roser R., Mischell R., Roser R., Kelbert S., Chandra I.,
RA Godek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Liu X., Mattei B., McIntosh T.J., Hernandez J.R., Houck J.,
RA Merson D.R., Pacleb J.M.,
RA Mount S.M., Mushon K.A., Mobarry C., Morris J., Moshrefi A.,
RA Merson D.R., Racleb J.M.,
RA Reinert K., Reinington K., Saunders R., Nusskern D.R., Pacleb J.M.,
Ra Reinert K., Reison K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
Ra Shue B.G., Siden Y., Barnes T., Sinbson M., Skupski M.P., Smith T...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscc
Ephydroidea; Drosophilidae; Drosophila.
NCBI_TaxID=7227;
                 Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T., Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9V518;
01-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q9V518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hypothetical SEQUENCE 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "A physical map of the Leishmania Genome Res. 8:135-145(1998).
EMBL; AL139794; CAC22658.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ivens A.C.,
Smith D.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N. STRAIN-FRIEDLIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rajandream M.A., Barrell B.G.; Submitted (JAN-2001) to the EM [2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=20196006;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SAGHSGSQRHQHTTTGGGHPYSGRVSVSRSTERTS---PHSKEGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity 51.1
23; Conservative
Spradling A.C., R., Tector C., T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              al protein.
300 AA; 3
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S.M., Bagherzad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PubMed=10731132;
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51.1%;
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13,
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Last sequence update)
Last annotation updat
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Pred. No. 0.04
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1DAB97137FB97B3A CRC64;
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0.042;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 300
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Search completed: January 28, Job time: 69 sec
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Best Local S
Matches 21
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Best Local Similarity
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Vitale D., Liguori R., Argiriou A.,
Jesse T., Heijnen L., Vos P., Mewes
Bevan M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      081761
081761;
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"The genome sequence of Drosophila melanogaster.";
Science 287:2185-2195(2000).
EMBL; AE003830; AAF58818.1; -
FlyBase; FBgn0033501; CG12911.
SEQUENCE 397 AA; 43204 MW; E49E427E50C4EC4C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                               EU Arabidopsis sequencing project;
Submitted (MAR 2000) to the EMBL/GenBank/DDBJ databases.
EMBL; ALO31032; CAA19875.1; -.
EMBL; AL161584; CAB80110.1; -.
Hypothetical protein.
SEQUENCE 343 AA; 36104 MW; 092E48BA313B242F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
Vitale D., Liguori R., Argiriou A.,
Lemcke K., Mayer K.F.X.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
HYPOTHETICAL 36.1 KDA PROTEIN.
F1715.120 OR AT4G33930.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Arabidopsis thaliana (Mouse-ear cress).

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=3702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases
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                                                                                                                                                                                                     SGSQHSH---TTTQGRSDASRGSSGSRSTSR---ETRDQEQSGDGSRHSG 48
                                                                                                                                                  SGSNHSSGTGSTHNGHSSGSNHSSATGSTHNGHTSTGSNHSSGNGSRHNG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18;
                                                                                                                                                                                                                                                                            Similarity 42.0
21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                        30.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , Argiriou A., De Simone V., Hoheisel J., Vos P., Mewes H.W., Mayer K.F.X., Schueller C.,
                            2002, 07:38:39
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                                                                                                                                                                                                                                                                         Score 77; DB 10; Length 343; Pred. No. 0.083; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        De Simone V., Mewes H.W.,
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